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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,916	09/09/2003	Robert J. Rappold III	014208.1519 (70-01-012)	5111

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BAKER BOTTS L.L.P.
2001 ROSS AVENUE, 6TH FLOOR
DALLAS, TX 75201-2980

EXAMINER	
CHAU, DUNG K	

ART UNIT	PAPER NUMBER
2169	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail2@bakerbotts.com
PTOmail4@bakerbotts.com

mN

Office Action Summary	Application No.	Applicant(s)	
	10/657,916	RAPPOLD, ROBERT J.	
	Examiner	Art Unit	
	Dung K. Chau	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/3/2004, 5/9/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/657916 has a total of 45 claims pending in the application; there are 3 independent claims and 42 dependent claims, all of which are ready for examination by the examiner.

Claim Rejections - 35 USC § 101

2. The following is a quotation of 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 16-30** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims "Software" lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable

medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Drawings

4. The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-45 are rejected under 35 U.S.C. § 102(e) as being anticipated by Ivanov Pub. No. US 2004/0215604.

As per **claim 1**, Ivanov teaches a method for providing an extensible agent comprising:

receiving a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determining one or more environment characteristics (Fig. 3; page 3, paragraphs [0032, 0039-0040]);

dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics as the query processor 322, which is a framework controller that coordinates the activity of LOQS 320 by distributing and delegating work to its components (page 3, paragraph [0037]); and

processing the client request using the selected agent components (page 3, paragraph [0037]) .

As per **claim 2**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 3**, Ivanov further teaches **instantiating the selected agent component objects** (page 3, paragraphs [0035-0036]).

As per **claim 4**, Ivanov further teaches the method of Claim 1 further comprising:

selecting one or more characteristics of the request (page 4, paragraphs [0045-0047]); and

wherein dynamically selecting at least a portion of a plurality of agent components based on the client request comprises **selecting at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 5**, Ivanov further teaches **storing the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 6**, Ivanov further teaches **one of the selected agent components comprising embedded structured query language (SQL) operable to query a database** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 7**, Ivanov further teaches the **client comprising a remote client and the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be

embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like. (page 2, paragraph [0024]).

As per **claim 8**, Ivanov further teaches **communicating a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 9**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging logic and component locating logic** as XML, DataBean (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 10**, Ivanov further teaches wherein **at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 11**, Ivanov further teaches **registering each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 12**, Ivanov further teaches wherein dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises:

automatically retrieving variable properties from a knowledgebase using the client request and the environment variables (page 1, paragraph [0008]); and

selecting at least a portion of the plurality of agent components based on the retrieved variable properties (page 4, paragraph [0044]).

As per **claim 13**, Ivanov further teaches wherein dynamically selecting at least a portion of the plurality of agent components based on the client request and the environment characteristics comprises **selecting at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [000054-55]).

As per **claim 14**, Ivanov further teaches **the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment** as local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 15**, Ivanov further teaches the method of Claim 1 further comprising:

migrating the plurality of agent components to an environment prior to receiving the request from the client (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein processing the client request using the selected agent components comprises automatically processing the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037).

As per **claim 16**, Ivanov teaches Software for providing an extensible agent comprising:

receiving a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determining one or more environment characteristics (Fig. 3; page 3, paragraphs [0032, 0039-0040]);

dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics as the query processor 322, which is a framework controller that coordinates the activity of LOQS 320 by distributing and delegating work to its components (page 3, paragraph [0037]); and

processing the client request using the selected agent components (page 3, paragraph [0037]) .

As per **claim 17**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 18**, Ivanov further teaches **operable to instantiating the selected agent component objects** (page 3, paragraphs [0035-0036]).

As per **claim 19**, Ivanov further teaches operable to

select one or more characteristics of the request (page 4, paragraphs [0045-0047]); and

wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request comprises **the software operable to select at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 20**, Ivanov further teaches **operable to store the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 21**, Ivanov further teaches **one of the selected agent components comprising embedded structured query language (SQL) operable to query a database** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 22**, Ivanov further teaches **the client comprising a remote client and wherein the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like. (page 2, paragraph [0024]).

As per **claim 23**, Ivanov further teaches **operable to communicate a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 24**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging and component location logic** as XML, DataBean (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 25**, Ivanov further teaches **wherein at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 26**, Ivanov further teaches **operable to register each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 27**, Ivanov further teaches wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises the software operable to:

retrieve variable properties from a knowledgebase using the client request and the environment variables (page 1, paragraph [0008]); and

select at least a portion of the plurality of agent components based on the retrieved variable properties (page 4, paragraph [0044]).

As per **claim 28**, Ivanov further teaches wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises **the software operable to select at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [000054-55]).

As per **claim 29**, Ivanov further teaches **the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment** as local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 30**, Ivanov further teaches the software of Claim 16 further operable to:

migrate the plurality of agent components to an environment prior to receiving the request from the client (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein the software operable to process the client request using the selected agent components comprises the software operable to automatically process the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037).

As per **claim 31**, Ivanov teaches a server comprising:

a memory operable to store a database and a knowledgebase, the knowledgebase comprising a plurality of component selection patterns (page 2, paragraph [0027-0031]); and

one or more processors collectively operable to:

receive a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determine one or more environment characteristics (Fig. 3; page 3, paragraphs [0032, 0039-0040]);

dynamically select at least a portion of a plurality of agent components based on one of the plurality of component selection patterns, the pattern selected based on the client request and the environment characteristics as the query processor 322, which is a framework controller that coordinates the activity of LOQS 320 by distributing and delegating work to its components (page 3, paragraph [0037]); and

access data in the database using the selected agent components (page 1, paragraphs [0007-0008]; page 3, paragraph [0037]).

As per **claim 32**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 33**, Ivanov further teaches the processors further operable to instantiate the selected agent component objects (page 3, paragraphs [0035-0036]).

As per **claim 34**, Ivanov further teaches the processors further operable to **select one or more characteristics of the request** (page 4, paragraphs [0045-0047]) and wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request comprise **the processors operable to select at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 35**, Ivanov further teaches the processors further **operable to store the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 36**, Ivanov further teaches wherein **accessing data in the database using the selected agent components is performed by one of the selected agent components comprising embedded structured query language (SQL)** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 37**, Ivanov further teaches **the client comprising a remote client and wherein the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like. (page 2, paragraph [0024]).

As per **claim 38**, Ivanov further teaches the processors further **operable to communicate a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 39**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging and component location logic** as XML, DataBean (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 40**, Ivanov further **teaches wherein at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 41**, Ivanov further teaches **the processors further operable to register each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 42**, Ivanov further teaches wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprise the processors operable to:

retrieve variable properties from the knowledgebase using the client request and the environment variables (page 1, paragraph [0008]);

selecting one of the component selection patterns based on the retrieved variable properties (page 4, paragraph [0044]); and

select at least a portion of the plurality of agent components using the component selection pattern (page 3, paragraph [0037]).

As per **claim 43**, Ivanov further teaches wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprise **the processors operable to select at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [000054-55]).

As per **claim 44**, Ivanov further teaches **the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment** as local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 45**, Ivanov further teaches the processors further operable to:

migrate the plurality of agent components to an environment prior to receiving the request from the client (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein the processors operable to process the client request using the selected agent components comprises the software operable to automatically process the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Documents:

US 20030191812 A1 Agarwalla, Rajesh S. et al.

US 20030060214 A1 Hendrey, Geoffrey et al.

US 20020129175 A1 Banavar, Guruduth Somasekhara et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung K. Chau whose telephone number is 571-270-1754. The examiner can normally be reached on Mon - Friday 7:30am - 5:00pm Est, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC

Dung Chau
Examiner
Art Unit 2169 LW

August 24, 2007

CHRISTIAN CHACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100